MAUL FOSTER ALONGI
3121 SW Moody Avenue, Suite 200 | Portland, OR 97239 | www.maulfoster.com

February 10, 2009
Project No. 8128.01.20

Mr. Dana Bayuk
Oregon Department of Environmental Quality
2020 SW 4th Avenue
Portland, Oregon

Re: Proposed Location of Angled Monitoring Well – Siltronic Corporation

Dear Mr. Bayuk:

The following letter presents preliminary baseline groundwater sampling results and identifies a proposed target area for the angled performance monitoring well (PMW) at the Siltronic Corporation (Siltronic) facility.

As suggested previously and discussed during the January 20, 2009 meeting with Oregon Department of Environmental Quality (DEQ), a PMW installed underneath the Fab 1 building using angled drilling techniques is required for development of the Performance Monitoring Plan (PMP). The location and depth of the screen interval were to be determined following evaluation of preliminary[1] baseline groundwater sampling.

During the weeks of January 19th and January 26th, 2009, groundwater samples were collected from 10 PMWs located downgradient of the Fab 1 building. The samples were collected and analyzed consistent with the Revised EIB Source Control Workplan (the Workplan) and subsequent communications with DEQ. Expedited results for volatile organic compounds (VOCs) by EPA Method 8260 were received during the weeks of January 26th and February 2nd, 2009. The attached figure shows preliminary results for trichloroethene (TCE) and its degradation products, cis-1,2-DCE and vinyl chloride.

The results indicate that the chlorinated VOC (CVOC) plume axis is located along a line from the source area to PMWs bounded by the WS-24 and WS-25 locations. As discussed with DEQ, the objective of the angled PMW is to provide data along the CVOC plume axis, between the source area and the downgradient PMWs. The proposed target area meets that objective, and is consistent with previous discussions with DEQ.

As indicated on the figure, the maximum CVOC concentrations in the downgradient PMWs were detected in the interval between approximately 90 and 110 feet below ground surface. This depth interval is fairly similar to the depths of the maximum concentrations in the

[1] Preliminary data have not been finalized by the contract laboratory and have not been validated by MFA, and are subject to change or qualification.

source area. Based on the depth information, MFA recommends targeting the 95 to 105 ft bgs depth interval with the angled PMW. Given the geometry of the angled well, the maximum horizontal distance that can be reached using angled drilling is 105 feet, as shown on the attached figure.

As discussed, the angled well will be installed using rotosonic methods, and requires installation of a pre-packed stainless steel well screen. Drilling and installation will otherwise be consistent with methods being employed for the remainder of the PMWs.

Based on the facility operational schedule, installation of the angled well has been firmly scheduled for the week of February 23 – February 27, 2009. As such, MFA requests DEQ's expedited approval of this submittal in order to facilitate timely installation. Based on the installation schedule and subsequent well development and sampling activities, MFA anticipates that the baseline samples should be received by March 9, 2009, with submittal of the PMP by April 6, 2009.

Sincerely,

Maul Foster & Alongi, Inc.

James G.D. Peale, RG
Senior Hydrogeologist

Ted Wall, PE
Principal Engineer

Attachments: Figure

cc: Tom McCue, Siltronic Corporation
Alan Gladstone, Davis Rothwell Earle and Xochihua
Chris Reive, Jordan Schrader Ramis
Jim Anderson, DEQ
Kristine Koch, EPA
Sean Sheldrake, EPA Seattle
Rene Fuentes, EPA Seattle
Eric Blischke, EPA Portland
Chip Humphrey, EPA Portland

Figure
Accessible Areas and Preliminary Group 3 PMW Data

Siltronic Corporation
Portland, Oregon

WS-20-112
WS-11-125/161
WS-22-112
GP-102
GP-103
GP-104
GP-105
GP-106
GP-107
WS-12-125/161
WS-8-59
WS-8-33
WS-14-125/161
WS-21-112/131
WS-25-96/111
WS-26-86/116
WS-23-116
WS-24-111/126
WS-27-86
Angled Well (see inset)
WS-16-125/161
WS-18-71
WS-19-71
WS-18-101
WS-19-101
WS-13-69/105
WS-15-85/140

WS-25-96
12
2250
1610
WS-25-111
61
1760
1550

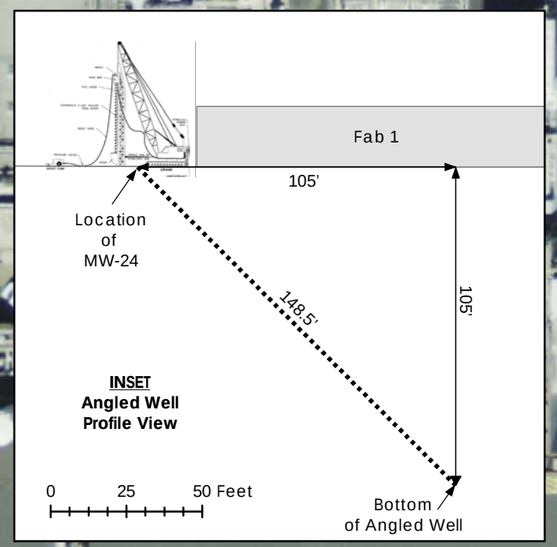
WS-21-112
413
2190
945
WS-21-131
ND
156
210

WS-26-86
ND
2.7
9
WS-26-116
1
250
86

WS-27-86
0.32
0.77
3.2

WS-23-116
3
314
96

WS-24-111
1.1
2800
823
WS-24-126
0.5
1.53
0.66



Legend

- Geoprobe
- Angled Well
- Existing Monitoring Well
- Target Zone for Angled Well Screen
- Accessible Area

Note:
1. Only a portion of monitoring well and geoprobe locations are posted.
2. All values are in ug/L and posted as follows:

Well ID-Depth
TCE
DCE
VC

3. Preliminary data are subject to change.

Source: Aerial photograph (July 2007) obtained from Metro Data Resource Center

N

0 60 120
Feet

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File: X:\8128.01 Siltronic Corp\120\Projects\Fig Accessible Areas and Preliminary Group 3 PMW Data.mxd

Project: 8128.01.20 Produced By: Hines/Maronn Approved By: J. Peale